

Winter 2016  
News from the  
**ABCs  
Laboratory**

285 times thank you!

In December 2011, we welcomed the first participants to the " LION " study. Today, a little over four years later, there are 285 families participating in this research project. 285 families means:

**458** developmental assessments conducted to date with your children

**1117** questionnaires completed by you, the parents

**916** goldfish cracker snack packs, and the same amount of juice, apple sauces and small cheese packets

**5 955** stickers offered to your children

**68 700** minutes that our research assistants had the pleasure of sharing with you!

**...and it continues!**

Without your commitment to this project, our work would be impossible to do. We warmly appreciate your trust and your time commitment to our research!

## Lab on TV



Last fall, the lab made an appearance on the television show " Le Code Chastenay ", broadcasted on Télé-Québec. Science journalist Martin Primeau was curious to know how we go about measuring children's social skills in our studies. In the report, two experiments are briefly presented : receiving a disappointing gift and moral reasoning dilemmas. Coupled with advanced technology such as eye tracking, psychophysiological recordings and analyzing facial expressions, these experiments help us understand children's social development. We use these with both typically developing children and clinical populations, such as kids who have suffered a traumatic brain injury. Are you curious to learn more, as the Code Chastenay team? See or re-watch the report!

Le Code Chastenay, the report « Comotions, non merci! »

<http://zonevideo.telequebec.tv/media/23177/des-commotions-non-merci/le-code-chastenay>



## Do you know Cindy Beaudoin ?

By Marilou Séquin, PhD student in Clinical Neuropsychology

Cindy has been part of the ABCs Laboratory since 2011. She is a research coordinator and has worked on several projects, including the " LION " study. To us, she is much more than a coordinator. She is THE essential resource at the lab and is THE person who has all the answers to our questions. As of last September, Cindy began her doctorate in neuropsychology in order to become a clinician and work with children .

**Cindy, what do you love the most about your work with children?** It is very pleasant to work with them, as we turn everything into a game! They are very spontaneous and natural, which in my opinion, renders our work relationship very authentic and humane. They are often very funny and I laugh a lot with them. Moreover, I find it very fulfilling to be able to understand and explain the children's difficulties, a subject which he/she cannot yet express.

**What was your favorite game when you were a child ?** I loved to draw and "play pretend ", and invent stories that I " mimicked " with toy characters. During the summer, however, I was always in a pool !

**Do you prefer hot chocolate, coffee or tea to warm yourself up following a winter activity ?** Definitely a good cappuccino!

**Would you have any suggestions for our readers in terms of activities they could do during the winter?** My daughter and I like to go tobogganing. In Montreal, there are plenty of spots which are completely free of charge, such as Ahuntsic Park. When it is too cold out, we occasionally go to indoor playgrounds, such as Funtropolis in Laval.



## What are « Executive Functions »?

By Jenny Bellerose, Doctoral student in Clinical Neuropsychology

Executive Functions are like the brain's central management system. Simply, they are a set of mental functions used to regulate and adjust behavior to the environmental demands. Many of these functions are evaluated in our studies (ex: LION, AMIS, ADOS), sometimes with the help of tests and at times using questionnaires completed by parents. Let's see what they are and how they can be helpful in everyday life:



**Inhibition** : It is knowing when to stop or change your behaviour depending on the environment in which you are located. For example, your child demonstrates inhibition when lowering his or her voice, or by *stopping* him or herself from speaking loudly upon entering a library. Inhibition is also involved when your child avoids giving the answer in class before the teacher asks him/her to do so.

**Planning**: Your child exercises his/her planning capabilities when deciding how he/she will perform school work or when preparing his/her school bag for the next day. The morning routine also relies on planning capabilities. Being a parent, you've probably noticed that some children need more guidance than others in order to get ready in the morning!

**Flexibility** : This feature allows children to change their game plan when their original plan is not working. A child who lacks flexibility tends to repeat the same mistakes many times over. For example, a boy who always puts his pencil case on his desk right by his elbow and constantly drops it on the floor. A lack of flexibility could be explained by comparing flexible people to a car which modifies its trajectory when necessary, while inflexible people behave more like trains which can not change their path, regardless of environmental requirements.

**Working Memory**: This is the ability to juggle and handle many pieces of information simultaneously. For example, performing mental calculations (without a paper and pencil!).

During the preschool and elementary school years, your child's brain is in full development and executive functions are still immature. In fact, these functions develop at a different pace for each child, all the way until adulthood. With toddlers, it is often parents who play the role of executive functioning for the child !



## The Members of the ABCs Laboratory



**Director:** Miriam Beauchamp, Ph.D.; **Post-Doctoral Researcher** : Naddley Désiré, Ph.D.; **Doctoral Students:** Hélène Audrit, Jenny Bellerose, Mathilde Neugnot-Cerioli, Charlotte Gagner, Mathieu Garon, Vincent Labelle-Chiasson, Gabrielle Lalonde, Catherine Landry-Roy, Marie-Ève Marchand-Krynski, Marilou Séguin, Anne Seni, Evelyn Vera-Estay; **Research Coordinators:** Cindy Beaudoin; Mariya Budanova; **Research Assistants:** Joanny Gingras, Sandra Jacintho, Adrienne L'Abbé, Julie Lalonde, Maud Lanckmans, Élizabel Leblanc, Pascale Mackay, Carley Marshall, Marjolaine Masson, Frédérick Morasse, Valérie Théorêt.